

**KENT FLOOD RISK MANAGEMENT COMMITTEE**

**Monday, 18th November, 2013**

**2.00 pm**

Council Chamber, Sessions House, County Hall,  
Maidstone





## AGENDA

### KENT FLOOD RISK MANAGEMENT COMMITTEE

**Monday, 18th November, 2013, at 2.00 pm**      Ask for:      **Andrew Tait**  
**Council Chamber, Sessions House, County Hall, Maidstone**      Telephone      **01622 694942**

*Tea/Coffee will be available 15 before the start of the meeting in the meeting room*

#### **Membership**

Conservative (4):      Mr M J Harrison      (Chairman),      Mr A H T Bowles,  
   Mr L B Ridings, MBE and Mrs P A V Stockell

UKIP (1):      Mr B E MacDowall

Labour (1)      Dr M R Eddy

Liberal Democrat (1)      Mr M J Vye

#### **UNRESTRICTED ITEMS**

*(During these items the meeting is likely to be open to the public)*

1. Substitutes
2. Declarations of Members' Interest relating to items on today's agenda
3. Minutes of the meeting on 22 July 2013 (Pages 5 - 12)
4. Dates of meetings in 2014  
Tuesday, 11 March 2014  
Monday, 21 July 2014  
Monday, 17 November 2014
5. East Coast Flooding Update (Pages 13 - 16)

6. Environment Agency Flood Alerts and Warnings and KCC Flood Response activities since the last meeting (Pages 17 - 20)
7. Flood and Water Management Act and Sustainable Drainage (Pages 21 - 24)

### **EXEMPT ITEMS**

*(At the time of preparing the agenda there were no exempt items. During any such items which may arise the meeting is likely NOT to be open to the public)*

***At the end of the public session, Members of the Committee should remain in the meeting room for 20 minutes for summing up***

Peter Sass  
Head of Democratic Services  
(01622) 694002

**Friday, 8 November 2013**

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**KENT COUNTY COUNCIL****KENT FLOOD RISK MANAGEMENT COMMITTEE**

MINUTES of a meeting of the Kent Flood Risk Management Committee held in the Council Chamber, Sessions House, County Hall, Maidstone on Monday, 22 July 2013.

PRESENT: Mr A H T Bowles, Dr M R Eddy, Mr M J Harrison, Mr B E MacDowall, Mr L B Ridings, MBE, Mrs P A V Stockell and Mr M J Vye

IN ATTENDANCE: Mr M Tant (Flood Risk Manager), Mr T Harwood (Senior Emergency Planning Officer), Ms C McKenzie (Sustainability and Climate Change Manager), Ms C Wissink (Coastal Communities Project Officer) and Mr A Tait (Democratic Services Officer)

ALSO IN ATTENDANCE: Mrs J Blanford (Ashford BC), Mr P Vickery-Jones (Canterbury CC), Mr J Muckle (Dartford BC), Mr J Scholey (Sevenoaks DC), Mr H Rogers (Tonbridge and Malling BC), Mr D Elliott Tunbridge Wells BC), Mr A Hills (Shepway DC) and Mr M Tapp (River Stour IDB)

**UNRESTRICTED ITEMS****1. Terms of Reference and Membership**

*(Item 1)*

(1) The Democratic Services Officer reported that the non-voting membership of the Committee set out in paragraph 2.2 of the report should be amended to indicate that Mrs Marion Ring was the representative of Maidstone BC and that Mr Anthony Hills was the Shepway DC representative.

(2) The Committee noted its Terms of Reference and membership as set out in the report and as amended in (1) above.

**2. Election of Chairman**

*(Item 3)*

(1) Mr A H T Bowles moved, seconded by Mrs P A V Stockell that Mr M J Harrison be elected Chairman of the Committee.

*Carried with no opposition*

(2) Mr M J Harrison thereupon assumed the chair.

**3. Minutes of the meeting on 19 November 2012**

*(Item 5)*

RESOLVED that the Minutes of the meeting held on 19 November 2012 are correctly recorded and that they be signed by the Chairman.

#### **4. Local Flood Risk Management and the Local Strategy**

*(Item 6)*

(1) Mr Tant gave a presentation to accompany his report. The [slides](#) are contained in the on-line agenda papers.

(2) Mr Tant went on to identify the other bodies involved in flooding within the County of Kent. These included the Emergency Services, the Parish and District Councils, neighbouring Authorities, the four Internal Drainage Boards (Lower Medway, Upper Medway, River Stour, Romney Marsh), two sewerage undertakers (Thames Water and Southern Water), the water companies, and the Environment Agency. Mr Tant also identified three standing committees with a flood risk management role (the LGA Inland Flood Risk Management Group, The LGA Coastal Special Interest Group, and the EFRA Committee).

(3) The County Council's role as the Lead Local Flood Authority was to provide a Local Strategy to manage local flood risk (flooding from surface water, groundwater and ordinary watercourses); to investigate flooding; to regulate ordinary watercourses (i.e. not main rivers); to maintain a register of structures and features; and to promote sustainable drainage systems (SuDs).

(4) Mr Tant said that KCC would assume responsibility for the approval and adoption of SuDS once the necessary parliamentary order had been confirmed. DEFRA was currently considering how and when this should happen, as there were a number of complex issues that still needed to be resolved before this could be done. DEFRA's target date was April 2014, but it was by no means certain that this would be achieved.

(5) Mr Vickery-Jones asked what weight the Lead Local Flood Authority carried with the various planning authorities and whether a local planning authority could designate "reserved areas" which would carry weight with a Planning Inspector when a developer appealed against a planning decision. Mr Tant replied that the Lead Local Flood Authority was not a statutory consultee. This meant that Planning Authorities did not have to take account of their advice. He also considered that it might be feasible to designate areas as unsuitable for housing within a Local Plan on flood risk grounds, so long as sufficient evidence could be provided.

(6) Mr Tant identified the areas of greatest flood risk from coastal and fluvial flooding in the County as the Low Weald, Thames Estuary and Romney Marsh. He also explained that some 76,000 homes in Kent were potentially at risk from surface water flooding, which compared to the figure of 54,000 in the second-most at risk county of Essex.

(7) KCC had carried out Surface Water Management Plans. These were studies of local flooding flood risk within the County. They could be high-level evidence gathering studies or in-depth studies which included modelling of the local flood risk infrastructure. Work on these studies was currently being carried out in Margate, Whitstable and Folkestone.

(8) Mr Tant next turned to the Local Flood Risk Management Strategy. The County Council was required to develop, maintain, apply and monitor a strategy for local flood risk management. Its objectives were to improve the understanding of the

risks from local flooding; to reduce the impact of flooding; to ensure that development took account of flood risk; to provide clear information and guidance on the role of risk management authorities; and to ensure that emergency plans and responses to flood incidents were effective.

(9) In response to questions from the Chairman, Mr Tant said that although the Local Flood Risk Management Strategy was required by Law to detail a number of functions and actions, not all of them were relevant in each of the Local Flood Risk areas. Kent's Local Strategy would be reviewed in May 2014, one year after its adoption.

(10) Mr Rogers asked why the map in the Local Strategy identified Paddock Wood as being at risk from flooding but did not do the same for Yalding and East Peckham. Mr Tant replied that this was because the Paddock Wood suffered from persistent local flooding whilst the risk to Yalding and East Peckham came from the main river. The Local Strategy dealt with local flooding, whilst other plans prepared by the Environment Agency covered fluvial and coastal flooding.

(11) Mr Vickery-Jones noted that 90% of Kent's water supply came from aquifers rather than reservoirs and asked whether there was a correlation between those areas at risk of flooding and aquifers. Mr Tant replied that the cause tended to vary from area to area. Groundwater flooding usually occurred after prolonged wet weather, whereas surface water flooding was usually caused by short, intense rainfall.

(12) RESOLVED that the report be noted following full consideration of its contents.

## **5. Coastal Communities 2150 - Presentation by Carolyn McKenzie, KCC Sustainability and Climate Change Manager**

*(Item 8)*

(1) Ms Carolyn McKenzie (KCC Sustainability and Climate Change Manager) gave a presentation on Coastal Communities 2150 (CC2150). The [slides](#) from this presentation are contained in the on-line agenda papers.

(2) Ms McKenzie said that the purpose of CC2150 was to help communities to develop their own local visions and action plans to decrease their vulnerability and increase resilience to climate and coastal change. She said that some impacts of climate and coastal change were already being felt through severe events such as flooding, severe heat or cold. Preparation for these events was not at the level that it needed to be.

(3) Ms McKenzie said that between the years 1961 and 2006, average temperatures had risen by 1 degree over all four seasons. These years had been characterised by heavy winds and downpours as well as a decrease in summer rainfall.

(4) Ms McKenzie explained that CC2150 was a partnership. It was led by the Environment Agency and involved Kent CC, Hampshire CC, Alterra (a research institute for the green living environment in the Netherlands), Province West-Vlaanderen (Belgium) and the Agency for Maritime and Coastal Services.

(5) Ms McKenzie then set out the risks and opportunities from climate and coastal change. The risks were loss of biodiversity, risk to built infrastructure, risk to flood security, increased frequency of flooding, health complications, increased rates of coastal erosion, shrinking of beaches and loss of landscape value. The opportunities provided were increased tourism, increased regeneration potential, agriculture and biodiversity diversification, renewable energy resources, skills development, economic development, and community building.

(6) Ms McKenzie went on to refer to the Severe Weather Impact Monitoring System that had been developed in Kent. This had revealed that on two weeks' rainfall had fallen during a two hour period on 20 July 2012. Another example of the impact of severe weather had been provided by the London Institute of Hygiene and Tropical Medicine which had revealed that 700 deaths had occurred due to heatwaves in 2013.

(7) CC2150's priority communities in Kent were Romney Marsh, Margate and Cliftonville, and the Isle of Sheppey. The method of delivery was to build knowledge, widen partnership working, develop visions, develop plans, and launch the project within the community. Each of these activities would lead naturally to the next, and the community launch would be the spur to further knowledge building as well as the final act of a project. Examples of practical actions were the development of flood alert systems, water retention and conservation measures and insulation from heat and cold.

(8) Ms McKenzie said that the next steps would be to attend and host events, gather local feedback and to develop the Vision and Action Plans. This would continue the pattern of very good local engagement that had already taken place.

(9) Members of the Committee thanked Ms McKenzie for her presentation and also commented on the excellent awareness-raising work undertaken by Christine Wissink (KCC Coastal Communities Project Manager).

(10) In response to a question from Mr Vickery-Jones, Ms Mckenzie said that the health impacts of climate change were to dramatically worsen environment-related conditions such as asthma.

(11) Ms Wissink replied to a question from Mrs Blandford by saying that a large number of studies had taken place locally, nationally and globally on plants that were able to sustain themselves. This was all part of work being undertaken to identify crops that needed less intensive water usage.

(12) RESOLVED that the presentation on CC2150 be noted with thanks, including the work that is being undertaken on the impacts of coastal and climate change.

## **6. Overview of Flood Risk in Kent and current issues - Presentation by Tony Harwood, Senior Emergency Planning Officer** *(Item 7)*

(1) Mr Harwood (Senior Emergency Planning Manager) gave a presentation. The [slides](#) are contained in the on-line agenda papers. He said that 2013 marked the 60<sup>th</sup> anniversary of the February 1953 East Coast storm surge and the 736<sup>th</sup> of the Great



Storm of February 1287 which diverted the mouth of the River Rother by 15 miles overnight and destroyed the towns of Old Winchelsea and Broomhill (<http://en.wikipedia.org/wiki/Broomhill>) as well as causing economic chaos along the English Channel coastline. It had cost 500 English and 50,000 Dutch lives.

(2) Mr Harwood then said that a major multi-agency flood response exercise had taken place on 30 April 2013 based on the scenarios of the 1953 storm surge event. The exercise had been informed by a new study on the effectiveness of existing defences and single and multi-agency contingency plans, whilst also testing the effectiveness of communications, which had been a major flaw in the response in 1953.

(3) Mr Harwood went on to describe some of the features of the 1953 disaster. In that event, loss of life in Erith had mainly occurred through hypothermia rather than drowning – so alerting, evacuation and humanitarian welfare interventions were all being enhanced. There had been significant breaches in the coastal defences at Canvey Island in Essex.

(4) It was important to note that sea levels had risen over the past 60 years. This was not only due to climate change. A second cause was hydrostatic rebound following the end of the last glaciation with land levels rising in the north of the UK, whilst the south was sinking.

(5) Mr Harwood then referred to the Folkestone floods of August 1996 which had seen fire fighters having to use sledgehammers to break down walls to release pockets of floodwater. The flooding had resulted in numerous people being made homeless and, in some cases, destitute.

(6) The year 2000 had seen major flooding in the Medway and Stour Valleys, impacting hugely in Tonbridge, Maidstone and surrounding villages, requiring the setting up of numerous rest centres.

(7) Mr Harwood moved on to explain the need for very sophisticated planning to protect populations that were vulnerable to flooding. Essential work had been undertaken to develop local multi-agency flood plans, multi-agency rapid response catchment plans and reservoir inundation plans.

(8) Mr Harwood replied to a question from the Chairman by saying that the Pitt Review had made 92 recommendations. One of these had called for political oversight of flood planning.

(9) Members of the Committee commented that flood defence work would be strengthened if an annual report on the work of the Kent Flood Risk Management Committee were to be presented to the County Council. Minutes from other Committees regularly appeared as items on the County Council agenda papers and it would be appropriate if this Committee's minutes were added.

(10) Mrs Stockell said that the best way to ensure that the Committee's work was embedded in the County Council's mainstream was for regular reports to be considered by the Environment, Highways and Waste Cabinet Committee.

(11) Mr Tapp asked whether Mr Harwood was in a position to give an assurance that there would be a timely warning if an event such as that of 1996 were to occur. Mr Harwood replied that this was a critical issue addressed by the new rapid response catchment emergency plans and through Severe Weather Advisory Group meetings. Such early warnings were vital in responding to sudden surface water emergencies.

(12) RESOLVED that the report and its implications be noted.

## **7. Environment Agency Flood Alerts and Warnings since the last meeting - oral report**

*(Item 9)*

(1) Mr Harwood reported that there had been 63 flood alerts and warnings since the last meeting of the Committee in November 2012. These had all been fluvial warnings, bar one for groundwater. He added that the flooding on the Nailbourne near Canterbury had lasted from 22 January to 19 April 2013.

(2) Mr Vickery-Jones asked whether there was a general policy of not housing people in ground floor flats if they lived in flood plains. Mr Harwood replied that this was often but not always recommended by the Environment Agency in their statutory consultee role to District planners. If an area was susceptible to fluvial flooding, it was usually recommended that the ground floor should not contain habitable rooms. Coastal flooding, on the other hand tended to pose more of a risk to the actual structure of a building because of the energy of the event – so coastal defences were prioritised over structural adaptation of individual buildings.

(3) RESOLVED that the report and its implications be noted.

## **8. Future Committee Topics**

*(Item 10)*

(1) Members of the Committee considered a report suggesting future topics for its consideration. It was recognised that a number of the items which appeared in the report would require an invitation for a speaker to come to the meeting. Additional topics suggested were:-

- the role of the Police, Fire and Social Services;
- the impact of farming;
- working with Medway on planning in the flood plains;
- the latest thinking of the Environment Agency and the funding available to it;
- highways, drainage and flooding as they relate to railways;
- coastal erosion and risk management as it relates to Dungeness Power Station.

(2) The Chairman's suggestion of a day to be set aside for site visits was agreed.

(3) RESOLVED that the topics set out in the report and in paragraph (1) above be agreed for future meetings together with the possibility of an additional day being set aside for site visits.

**9. Date of next meeting - Monday, 18 November 2013**  
*(Item 11)*

The Committee noted that its next meeting would be held on Monday, 18 November 2013.

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**To:** Kent Flood Risk Management Committee – 18 November 2013

**From:** David Brazier, Cabinet Member, Transport and Environment  
Stuart Beaumont, Head of Community Safety and Emergency Planning

**Subject:** East Kent Flooding Update

**Classification:** Unrestricted

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**Summary:** To update the Kent Flood Risk Management Committee on the national, sub-national and county preparedness for an East Coast tidal flood inundation.

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## 1. Background

1.1 The Kent coastline is approximately 525 km in length. Tidal and coastal flooding is a key risk for the Kent region. Flooding from the coast is a natural event and may occur as a result from overtopping of coastal defences by waves, increased tidal levels or storm surges (or a combination of all three).

1.2 January 2013 saw the 60<sup>th</sup> anniversary of the 1953 East Coast Flood (ECF) which killed 307 people in the UK with 24,000 homes affected and 32,000 people evacuated. Some 46,000 animals died, and a month after the flooding, the estimated cost was £40–50 million (damages would be approximately £5 billion if the scale of flooding was repeated today). Over 1000 deaths also occurred in Holland.

1.3 As a 'tier one risk' to UK national security, coastal flooding presents a compelling challenge to co-ordinating resilience responses (and recovery) at the national, sub-national and local levels. This uniquely predictable, wide-area threat requires a coherent and co-ordinated response across a large number of Local Resilience Fora (LRF). The prioritisation of national objectives and the deployment of national specialist assets (e.g. flood rescue, the organisation of mutual aid to affected coastal communities) will require responders, including KCC and District councils at all levels to work together, both prior to and during the event to deliver a national joint response.

1.4 The successful response to major coastal flooding relies upon accurate and timely weather predictions by the Met Office and Flood Forecasting Centre; intelligence from the Environment Agency's flood forecasting teams; a well-rehearsed decision making process to consider pre-determined critical decision points; the ability to coordinate national resources to be swiftly mobilised to the most appropriate locations; and local response plans and mutual aid arrangements to minimise the risk to life, property, infrastructure and essential services such as utilities. As well as local planning and an intimate knowledge of the local geography, the response also relies on members of the general public receiving and understanding the warnings and knowing what to do themselves, including preparation for evacuation.

## 2. The National Threat

2.1 An ECF event is most likely to occur between September and April, and has no more than a 0.5% chance of occurring in any year but could, nationally, lead to:

- Up to 400 fatalities and 11,000 injured.
- Up to 297,000 residents affected – with 80% in the reach from the Humber to North Norfolk, with some 20% likely to require assistance with evacuation.
- 357,000 buildings affected, including 224,000 residential properties.
- Over £23 billion of damage to property (with activation of flood warning).
- 4,806 km of roads directly affected, as well as 423 bridges and fords.
- People stranded over a large area with 11,000 people in need of rescue or assistance in-situ over a 36 hour period.
- 107,000 people in caravan and camping sites affected during high season.

Areas affected by these figures are all coastal locations from Northumbria to **Kent**, though the likely impacts to different areas will vary. London and the Thames estuary should not be affected severely due to the high standard of flood protection offered by the Thames Barrier and associated defences.

2.2 There are likely to be **five broad phases** in the management of a major coastal flooding event, though this will depend on how the event develops:

1. Early Warning: over 5 days out, Central Government is likely to be alerted that an exceptional storm is heading towards the UK, but that there is low confidence in its precise track and potential impact.
2. Assessment phase: 3-5 days out, understanding and confidence in the characteristics of the weather pattern will increase; the first flood guidance statements and severe weather warnings are likely to be issued and Government likely to commission an assessment of demand on resources.
3. Preparedness phase: 3 days to a few hours out, key decisions taken on how best to mitigate the risk including prioritisation and deployment of national assets and local decisions on evacuation and sheltering.
4. Impact: from a few hours before impact until flood waters have receded and immediate threat to life and community wellbeing has passed. This could last from a few days to several weeks depending on the impact in an area.
5. Recovery: the process of rebuilding lives and communities affected by the storm and is likely to last years for an event on this scale.

### **3. Kent's Preparedness**

3.1 The Kent Resilience Forum, East Coast Flooding Workshop was held at the Ashford International Hotel on Tuesday 30 April 2013 with some 200 attendees including KCC Emergency Planning Officers and District Council representatives. The Environment Agency in Kent and South London has invested in time and resources, (£120,000 in the development of the 'North Kent Coast Modelling Project'), to develop flood data and mapping to support the effective planning for evacuation and critical infrastructure resilience in the county during an East Coast flood event.

3.2 Such an event would see some 12,500 properties in Kent and Medway at risk. Specific areas at risk include:

- Dartford / Erith / Slade Green, Dartford River Crossing,
- Swanscombe peninsula to Cliffe,
- Ebbsfleet International Railway hub, Medway estuary,
- HM Prison Services in Sheppey, Graveney Marshes / Seasalter / Swalecliffe
- St. Nicholas at Wade / Marshside / Chislet
- Sandwich / Deal, Romney Marsh
- Power Station at Dungeness, Dover Port

The good news for Kent is that it will have more time to respond to the warnings as its relevant areas would be the last to be affected because the tidal surge would emanate in Scotland and work its way down the East Coast of England concluding its path in Kent's tidal waters.

3.3 Extensive preparatory work has already been undertaken in Kent and Medway for ECF and the general flood threats to each district. As well as linking in to the national and sub national fora, (Kent is represented by Mark Salisbury from KCC), KCC, the district authorities and Medway all have existing and extensive flood plans that are up to date and have been tested and exercised. There is also a Kent Resilience Forum (KRF) Pan Kent Flood plan which is maintained by the Environment Agency (EA).

### **4. Next Steps**

4.1 Kent (KRF) will be involved in a joint exercise with Essex Resilience Forum partners to test our respective ECF preparedness in January 2014 as part of the sub national ECF steering group exercise agenda. The KRF is also hosting a bespoke Dft / Defra ECF workshop in Dover to explore the specific preparedness of the Dover Harbour ports community and assets. The KRF Public Warning and Informing group have produced a public facing booklet entitled 'Are you Ready' which includes extensive details on how to prepare and what to do in a flood situation. This will be published in January 2014.

4.2 KCC Emergency Planning and the EA intend to formulate a Pan Kent multi agency ECF group before 2014, to ensure that all existing plans, testing, exercising and public messaging highlights the specific risks of a tidal inundation and that additional planning regarding issues such as identifying evacuation routes and key trigger points is agreed and embedded.

4.3 Whilst the likelihood of an ECF remains very low, the potential impact cannot be underestimated. It is clear that there is a central government 'push' from Dft and Defra, with strong influences from the Minister for Government Policy in the Cabinet Office, Oliver Letwin MP, to ensure that the affected communities and their assets along the national East Coast are as prepared as they can be for such an event. As such, Kent's multi agency partners are well placed to respond now and in the future.

## **5. Recommendations**

### 5.1 That Members:

- Note the potential level of the threat that an East Coast tidal surge could pose to the communities, infrastructure, the environment and economy of Kent;
- Endorse the KCC, and wider-partnership, approach outlined within this report; and
- Contribute any additional matters arising from debate by the Committee.

Mark Salisbury, Emergency Planning Team Manager, Customer & Communities  
01622 221379 / [mark.salisbury@kent.gov.uk](mailto:mark.salisbury@kent.gov.uk)

*Background documents: None*



**To:** Kent Flood Risk Management Committee – 18 November 2013

**From:** Michael Hill, Cabinet Member, Customer and Communities  
Stuart Beaumont, Head of Community Safety and Emergency Planning

**Subject:** Environment Agency Flood Alerts and Warnings and KCC flood response activity since the last meeting.

**Classification:** Unrestricted

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**Summary:** To update Kent Flood Risk Management Committee on Environment Agency Flood Alerts and Warnings and KCC flood response activity since the last meeting of the Committee on 22<sup>nd</sup> July 2013. Members are requested to note this report.

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## 1. Background

1.1 KCC Emergency Planning and the Call Centre receive Environment Agency Flood Alerts and Warnings by e-mail and fax on a 24 hour 7 days a week basis. Impacts upon communities, infra-structure and the wider environment are assessed and a response mobilised as required.

1.2 Some 70,000 properties in Kent are located within areas at risk of fluvial or tidal flooding. Where practically and hydrologically possible, these properties are offered a Flood Warning Service by the Environment Agency. However, other parts of the county are also potentially vulnerable to surface or ground water flooding. Early warning of flood risk to communities (including areas outside of floodplains) is delivered through Flood Guidance Statements, Severe Weather Warnings and Severe Weather Advisory Group.

1.3 Environment Agency Flood Alerts are issued earlier than a Flood Warning, to provide advance notice of the possibility of flooding. Rivers levels will be high, and flooding of low lying land and roads is possible. Tidal Flood Alerts will correspond with high tides, and/or significant waves, with some spray overtopping and flooding of low lying land and roads possible. Property flooding is not expected, but the Alert does serve as an early warning, and may precede Flood Warnings. The Flood Alert is issued in order that the public, the emergency services, local authorities and other bodies are aware of an increasing chance of flooding and take appropriate preparatory action.

1.4 Flood Warnings are used to warn that flooding of property is expected and that immediate action should be taken to protect life and property. They are issued when flooding of homes and businesses is expected. The Environment Agency aim to issue Flood Warnings at least two hours before the onset of property flooding.

1.5 Severe Flood Warnings are issued to warn of significant risk to life or disruption to the community from widespread or prolonged flooding. Property

owners, the public at risk, the emergency services, and local authorities should act to protect life and property. This is likely to involve an enhanced response and the commitment of significant resource, in terms of personnel, assets and expenditure. Wherever possible, the decision to issue a Severe Flood Warning will be taken in conjunction with multi-agency partners.

## **2. Latest situation**

2.1 Since the last meeting of the Kent Flood Risk Management Committee on 22nd July 2013 18 Flood Alerts have been received, covering the River Eden and Eden Brook (x3), Upper River Stour (x2), River Darent catchment (x3) and Plenty, Swalecliffe and West Brooks (x2), Upper River Medway (x1), Lower River Medway (1) River Bourne (x2), Rivers on the Isle of Sheppey (x1), River Rother (2) New Romney Sewer Arm (x1). In addition, 7 Coastal Flood Alerts have been received, covering the coast from Fairlight to Dungeness (1), Sandgate to Dungeness (1), Pegwell Bay to Deal (2), Seasalter to Margate (1), Tidal Medway, Swale and Coastal Isle of Sheppey (1), and Dartford to Allhallows (1). No Flood Warnings have been issued.

2.2 In addition 10 Severe Weather Warnings (9 for heavy rain and 1 for high winds) covering Kent have been issued by the Met Office, and 7 surface water flooding events have been reported to the KCC Emergency Planning Duty Officer for action.

2.3 Further, the risk of an East Coast tidal surge impacting Kent on 10<sup>th</sup> October triggered a heightened state of readiness and multi-agency liaison. Four test closures of the Thames Barrier have also taken place since the last meeting.

2.4 The St. Jude's day storm on 28<sup>th</sup> October, and subsequent rainfall through the start of November have brought heightened risks of tidal and fluvial flooding. Ground conditions are now quite wet, meaning that river levels are expected to rise more rapidly and significantly in response to further rainfall. Tidal defences, and shingle beaches in particular, have been affected by recent stormy conditions, and the Environment Agency and local authorities are working to repair these.

## **3. Next Steps**

3.1 The autumn and winter period has historically seen an increased risk of flooding within Kent, and the wet autumn (with long range weather forecasts indicating the weather will remain unsettled), suggests that a high level of vigilance needs to be maintained by the local resilience community and residents.

3.2 Members will continue to be regularly updated on flood alerts and response in Kent.

## **4. Recommendations**

4.1 That Members:

- Note the level of alerts received since the last meeting of the Kent Flood Risk Management Committee;

- Note the need for sustained vigilance in light of recent rainfall and forecast unsettled weather conditions; and
- Contribute any additional matters arising from debate by the Committee.

Tony Harwood, Senior Emergency Planning Officer, Customer & Communities  
01622 694806 / [tony.harwood@kent.gov.uk](mailto:tony.harwood@kent.gov.uk)

*Background documents: None*

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**To:** Kent Flood Risk Management Committee – 18 November 2013

**From:** David Brazier, Cabinet Member, Transport and Environment  
Paul Crick, Director Planning and Environment

**Subject:** Flood and Water Management Act and sustainable drainage

**Classification:** Unrestricted

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**Summary:** To update the Kent Flood Risk Management Committee on details of KCC's responsibilities under Schedule 3 Flood and Water Management Act with respect to Sustainable Drainage approval.

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## 1. Background

- 1.1 The Flood and Water Management Act 2010 (the Act) provides new legislation for the management of flood and coastal erosion risk in England and Wales. Schedule 3 of the Act requires construction work with drainage implications to have drainage systems approved before construction may begin and promotes the utilisation of sustainable drainage systems (SuDS).
- 1.2 Sustainable drainage systems provide a more natural approach to managing water close to its source, where it falls. SuDS schemes can reduce the impact of development by slowing runoff, encouraging infiltration, trapping pollutants, providing biodiversity and increasing amenity for residents through provision of open space. SuDS components can be both landscaped features, including green roofs, ponds, wetlands, and swales, as well as engineering features, such as permeable pavement and soakaways.
- 1.3 The Act also establishes County Councils and Unitary Authorities as the "approving body" for drainage (also known as SAB, the SuDS approving body). The SAB must ensure that the applicant has designed the SuDS in accordance with the National Standards, which are set by Defra. Once approved, the SAB must adopt and maintain those SuDs that are functioning properly and serving more than one property.
- 1.4 Defra published consultation documents for secondary legislation to support Schedule 3 in December 2011. The consultation received an unexpected 320 responses. Defra has subsequently convened Task & Finish groups to provide input into further development of the approval process, national standards for sustainable drainage and funding to resolve the issues raised by the consultation.
- 1.5 Defra have stated that they intend to commence this legislation on 6 April 2014 for major developments (planning applications for 10 or more units), proceeding to all developments involving more than one property after three years.
- 1.6 Defra had previously indicated that six months notice of commencement would be provided to allow authorities sufficient time to prepare and resource

these new responsibilities. Unfortunately due to the necessary consultations within Westminster this cannot be accommodated as the regulations are not expected to be laid before Parliament before December 2013.

- 1.7 The topic of approving body has been discussed at the Environment, Highways and Waste Cabinet Committee on 10 January 2013, as well as a number of previous Flood Risk Management Committees, most recently 16 March 2012. This paper adds details about the process required by Defra.

## 2. Delivering the SAB role

- 2.1 In order to undertake the new SAB responsibilities, County Councils will be required to undertake consultation, technical review, approval, inspection and maintenance functions:
  - a. **Pre-application Consultation:** The SAB will need to provide pre-application advice to developers on preferred approaches and drainage considerations.
  - b. **Approval and Adoption:** On receipt of applications for drainage approval the SAB will be required to determine if the proposed drainage strategies meet the National standards, consult with statutory consultees, make a decision and advise the applicant on approval or refusal following this technical review. Once drainage systems have been approved the SAB will be required to undertake inspections of systems requested for adoption and inform maintenance teams of anticipated maintenance requirements.
  - c. **Maintenance:** The SAB will be required to adopt and maintain those SuDS that serve more than one property. As SuDS systems are constructed, they will be added to a suitable asset management system and maintained to ensure that it continues to function as designed.
- 2.2 KCC has undertaken an assessment of how these new responsibilities could be undertaken, including the resources and skills currently available. Under the Act we can delegate this role to another public body, but this option is not proposed as there is no other body with the skills or resources that covers the whole county that could take on this task. Delegating it to several other bodies (for example Internal Drainage Boards or District Councils) would not provide an even coverage of the county with the required skills and would require considerable coordination to ensure it is consistently delivered.
- 2.3 Following the assessment of resources it is proposed that Highways & Transportation (H&T) is best placed within KCC to deliver the SAB role. H&T currently undertakes highway technical approval and drainage functions similar to the tasks required of the SAB. The SAB processes will broaden these responsibilities to include the management of non-highway water and associated infrastructure.
- 2.4 The resourcing requirements for the SAB are dependent upon the extent of construction which has drainage implications and the time it takes to process each application. A consultation package issued by Defra in December 2011

gave estimated application process times for differing sizes of development. From an assessment of historic planning applications it is estimated that 500 major applications are made annually across the County. On the basis of these figures it is estimated that the new role will require as many as 12 staff to review applications, approve and inspect new assets for major applications alone. It is anticipated that the staff will be self-funded by the fees collected from the approval process.

- 2.5 It is currently proposed that KCC will build up to the required staffing level. Initially a small number of staff will be assigned to the SAB function, and these will be supported by KCC's technical contractor. This will allow the resource implications to be fully understood before appointing more staff.
- 2.6 In addition to staff, new tools for application processing, asset management and inventory will be required. Training has already commenced for building understanding of new drainage approach. Supporting documentation is being developed. KCC coordinated the production of planning guidance on masterplanning for sustainable drainage with the SE7 (a group of all the county and unitary authorities in the southeast) to support planners from consultancies and local district councils.

### **3. Financial Implications**

- 3.1 The draft supporting regulations for Schedule 3 provides an application process with associated fees for pre-application discussions, application submission and an on-going maintenance charge. The intention of the legislation is that once embedded, activities undertaken would be self-funding and the whole process should be self-supporting.
- 3.2 The fee schedule for drainage applications as defined by Defra is fixed for three years, after which the SAB is able to adopt its own fee schedule, so long as it is on a cost recovery basis.
- 3.3 Pre-application fees will be able to be claimed on a cost recovery basis as set out in the Local Government Act 2000. Pre-application discussions have been identified as key to ensuring both efficient implementation of the regulation and appropriate inclusion of SuDS measures.
- 3.4 The most critical financial issue is that the Act and supporting legislation does not define the funding mechanism for on-going maintenance of these new assets which will be adopted by KCC. Defra had originally proposed to fund maintenance initially through a grant for the first three years. This has subsequently been dropped from the proposals. Defra is still considering the options for maintenance funding and discussing these with other departments.

### **4. Summary**

- 4.1 The Act gives KCC a statutory duty to approve, and in certain circumstances adopt and maintain, drainage systems for new developments.
- 4.2 KCC has a strong skill set in flood management and drainage. It is proposed that these skills are built upon to deliver the SAB role.
- 4.3 It is expected that the SAB will be self-funding through pre-application charges, application fees and maintenance fees. However, the charging and fee structures have not been fully announced by Defra.

## **5. Recommendations**

### 5.1 That Members:

- Note the new responsibilities which may soon commence with respect to drainage approvals; and
- Contribute any additional matters arising from debate by the Committee.

Bronwyn Buntine, Sustainable Drainage Engineer, [bronwyn.buntine@kent.gov.uk](mailto:bronwyn.buntine@kent.gov.uk) , 01622 696793

Max Tant, Flood Risk Manager, [max.tant@kent.gov.uk](mailto:max.tant@kent.gov.uk), 01622 221691

### *Background documents:*

Draft National Standards and statutory instruments are available online at:  
<http://www.defra.gov.uk/consult/2011/12/20/sustainable-drainage-systems-1112/>

Flood and Water Management Act 2010 is available online at:  
<http://www.legislation.gov.uk/ukpga/2010/29/contents>